

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Claim 1 (currently amended): A fluid dynamic bearing motor comprising:

a base having a bore hole;

a liner secured within the bore hole;

a rotor assembly having a shaft partially disposed within the liner, the shaft configured to rotate relative to the liner; ~~[[and]]~~

a fluid dynamic bearing disposed between the liner and shaft; and

a recirculation channel disposed outside of the liner, the recirculation channel for recirculating lubricating fluid during relative rotation of the shaft and the liner.

Claim 2 (currently amended): The fluid dynamic bearing motor of claim 1, wherein the liner includes a bottom having a hole formed therethrough.

Claim 3 (currently amended): The fluid dynamic bearing motor of claim 2, wherein the base includes ~~[[a]]~~ the recirculation channel, the recirculation channel extending along a wall of the bore hole and along a bottom of the bore hole.

Claim 4 (original): The fluid dynamic bearing motor of claim 3, further comprising a capillary seal having a reservoir, the capillary seal defined between a wall of the liner and a tapered section of the shaft.

Claim 5 (original): The fluid dynamic bearing motor of claim 4, wherein the fluid dynamic bearing is configured to pump bearing fluid through the hole in the bottom surface of the liner into the recirculation channel and through the recirculation channel into the reservoir.

Claim 6 (original): The fluid dynamic bearing motor of claim 1, wherein the fluid dynamic bearing comprises a journal bearing and a thrust bearing.

Claim 7 (original): The fluid dynamic bearing motor of claim 6, wherein the journal bearing is configured asymmetrically to pump bearing fluid towards a bottom of the liner.

Claim 8 (original): The fluid dynamic bearing motor of claim 7, wherein the journal bearing includes at least two grooved bearing surfaces.

Claim 9 (original): The fluid dynamic bearing motor of claim 1, wherein the base is at least one of forged, molded or casted.

Claim 10 (original): The fluid dynamic bearing motor of claim 1, wherein the base is at least one of machined, casted, forged or molded.

Claim 11 (original): The fluid dynamic bearing motor of claim 1, wherein the rotor assembly includes a cold-worked hub.

Claim 12 (original): The fluid dynamic bearing motor of claim 11, wherein the cold-worked hub is at least one of drawn, hydroformed, spun, molded, casted, forged or stamped.

Claim 13 (original): The fluid dynamic bearing motor of claim 11, wherein the cold-worked hub further includes: a flange; and a stepped cylindrical sidewall extending from the flange and circumscribing at least a portion of the base.

Claim 14 (original): The fluid dynamic bearing motor of claim 11, further comprising a magnet attached to the cold-worked hub and a stator coupled to the base, the magnet and the stator being configured to generate a downward acting preloading force on the cold-worked hub.

Claims 15-20 (cancelled)

Claim 21 (new): The fluid dynamic bearing motor of claim 2, wherein the liner includes a top having an opening and the recirculation channel extends from the hole formed through the bottom of the liner to the opening of the liner.

Claim 22 (new): The fluid dynamic bearing motor of claim 2, wherein the liner includes a top having an opening and the recirculation channel is disposed to communicate lubricating fluid from the hole formed through the bottom of the liner to the opening of the liner.